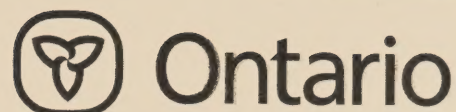


3 1761 12059700 0

CA20N
PI
-2004
B72

Government
Publications




BUILDING A BETTER TOMORROW

AN INFRASTRUCTURE PLANNING, FINANCING AND PROCUREMENT
FRAMEWORK FOR ONTARIO'S PUBLIC SECTOR

Ministry of Public Infrastructure Renewal

July 2004



Digitized by the Internet Archive
in 2024 with funding from
University of Toronto

<https://archive.org/details/31761120597000>

BUILDING A BETTER TOMORROW

AN INFRASTRUCTURE PLANNING, FINANCING AND PROCUREMENT
FRAMEWORK FOR ONTARIO'S PUBLIC SECTOR

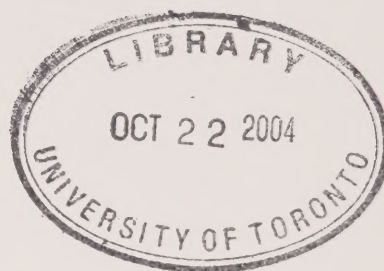
Ministry of Public Infrastructure Renewal

July 2004

General enquiries regarding
*Building a Better Tomorrow: An Infrastructure Planning, Financing and Procurement
Framework for Ontario's Public Sector*
should be directed to:

Ministry of Public Infrastructure Renewal
6th Floor, Frost Building South
7 Queen's Park Crescent
Toronto, Ontario M7A 1Y7

Telephone: 416-325-0424
Fax: 416-325-8440
E-mail: info@pir.gov.on.ca



For electronic copies of this document, visit our Web site at
www.pir.gov.on.ca

© Queen's Printer for Ontario, 2004
ISBN 0-7794-6499-0

Le document

*Pour un avenir meilleur : un cadre de planification, de financement et d'acquisition de
l'infrastructure pour le secteur public de l'Ontario*
Est disponible en français

INFRASTRUCTURE PLANNING, FINANCING AND PROCUREMENT (IPFP) FRAMEWORK

CONTENTS

Minister's Letter

1. Principles and Priorities
2. Provincial Infrastructure Investment Priorities and Planning
3. Infrastructure Investment Planning and Development
4. Roles, Responsibilities and Approvals Process
5. Transparency and Accountability
6. Procurement Best Practices
7. Asset Management

CONTENTS



1. Introduction	1
2. General Principles of Management	10
3. The Management Process	25
4. The Management Environment	45
5. The Management Function	65
6. The Management System	85
7. The Management Process	105
8. The Management Environment	125
9. The Management Function	145
10. The Management System	165

MINISTER'S LETTER

Poor planning and under-investment have left the province with the most serious infrastructure deficit in its history. At the same time, Ontario is growing at an unprecedented rate. Our challenge is to make sure we have a modern and efficient public infrastructure to deliver quality public services, stimulate economic growth, create jobs and improve the quality of life we enjoy in Ontario. To help meet the government's commitment to deliver better health care, higher-quality education and a clean and safe environment, I am pleased to release this *Infrastructure Planning, Financing and Procurement Framework for Ontario's Public Sector*. This framework is a critical step forward to help rebuild Ontario's public infrastructure and improve the delivery of key public services.

For the first time in Ontario's history, a provincial government has established a comprehensive framework to guide the Ontario government, municipalities and broader public-sector partners in choosing the best options for planning, financing and procuring public infrastructure assets. The framework establishes clear guidelines for this. It is based on five fundamental principles:

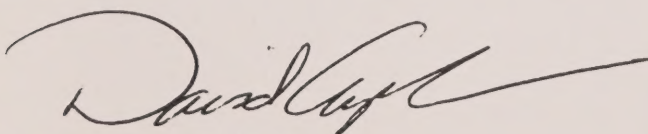
- the public interest is paramount;
- value for money must be demonstrable;
- appropriate public control/ownership must be preserved;
- accountability must be maintained; and
- all processes must be fair, transparent and efficient.

This framework was developed in consultation with provincial infrastructure ministries, the public and hundreds of stakeholders representing communities, businesses and infrastructure partners from across the province, and incorporates research and best practices from other jurisdictions. Our government appreciates the advice and input we received in the development of this framework.

The Ministry of Public Infrastructure Renewal will develop additional tools and best-practice guides to assist public-sector partners to effectively use this framework to deliver on critical public infrastructure investments.

I believe that everyone involved in building public infrastructure in Ontario will find this framework a useful resource as we work to meet our infrastructure challenges.

Sincerely,



The Honourable David Caplan
Minister of Public Infrastructure Renewal

PRINCIPLES AND PRIORITIES

1.1 INTRODUCTION: THE PUBLIC INFRASTRUCTURE CHALLENGE

Years of neglect and poor planning have allowed Ontario's public infrastructure to decline, and damaged the delivery of critical public services. Waiting lists in hospitals, rundown schools, and congestion and gridlock on our roads are all visible signs of this neglect. The cost of correcting past under-investment and of building the public facilities we need to accommodate future growth may exceed \$100 billion. Renewed and sustained action is needed now to tackle Ontario's public infrastructure challenge. Given the magnitude of the challenge, Ontario needs both a better way to manage growth and a better way to finance and manage investments in public infrastructure.

In July 2004, the government introduced its vision for the future development of the Greater Golden Horseshoe in a discussion document, *Places to Grow: Better Choices. Brighter Future*, which describes how and where the region should grow over the next 30 years. That vision will later be extended to other regions of the province.

This document, *Building a Better Tomorrow*, establishes a framework for planning, financing and procuring the public infrastructure that will help make the government's vision of the future a reality and improve the delivery of public services in every part of the province. It is the first comprehensive strategy for planning, financing, building and managing public infrastructure in Ontario's history, and will be a critical tool in Ontario's new approach to planning for population and economic growth. It is a key step in the government's plan to finance and rebuild the province's public infrastructure and improve the delivery of public services.

The Ontario government is committed to improving the essential public services Ontarians need and deserve and to building strong, vital communities. The renewal of the public infrastructure that enables the delivery of these services and supports a high quality of life in communities throughout the province is critical if we are to achieve these objectives. This framework provides guidance on how these critical infrastructure investments will be delivered in a manner that will produce quality and measurable results and be consistent with the principles, objectives and priorities outlined below.

This framework is designed to support the Ontario government's first-ever three- and 10-year infrastructure investment plans for Ontario and to increase the level of collaboration among all partners in delivering public infrastructure investments. The multi-year plans will set out the priorities and timelines for the creation and renewal of critical public infrastructure that will improve the delivery of essential public services and build a quality of life in Ontario that is second to none. The investment plans, together with this framework, provide Ontario's public sector with a comprehensive vision as to what and how public infrastructure initiatives are to be created and renewed.

1.2 THE SOLUTION: GUIDING PRINCIPLES FOR PLANNING, FINANCING AND PROCURING PUBLIC INFRASTRUCTURE

Meeting the challenge of providing the public infrastructure we need will require careful management and flexibility. A range of models is available to plan, finance and procure public infrastructure initiatives. Choosing the right model for a given initiative should be done in a systematic and principled manner. All models must be examined and evaluated in the context of fundamental principles that protect and promote the public interest.

The following principles have been developed to guide public infrastructure development in the province. These principles make it clear that the public interest is to come first in any and all activities related to public infrastructure. These principles are the foundation upon which the government will bring about real, positive change in public infrastructure planning, financing and procurement policies and practices.

All public-sector partners will be required to pursue a balanced, pragmatic approach to infrastructure renewal, guided by five fundamental principles:

- **Protection of the Public Interest:** The public interest is paramount in the government's infrastructure renewal plan. All public infrastructure initiatives should be delivered efficiently; protect and promote public health and safety; ensure high-quality public services; and be accessible to all Ontarians.
- **Value for Money:** Ontarians expect and deserve value for their tax dollars. All public infrastructure investments should be cost-effective, optimize risk allocation, and be completed on time and within budget. There must be safeguards against financial returns that are not proportional to the associated risk where private financing is involved in the delivery of public infrastructure initiatives.
- **Appropriate Public Control/Ownership:** Appropriate public control/ownership of public assets must be preserved. In particular, consistent with the principle of appropriate ownership/control, the framework states that public ownership of assets will be preserved in the hospital, water/sewer, and public school sectors.
- **Accountability:** Stakeholders involved in delivering public infrastructure initiatives must be accountable. Public infrastructure initiatives should have clear lines of responsibility and accountability, rigorous and transparent reporting and oversight requirements, and clear, measurable performance measures.
- **Fair, Transparent and Efficient Processes:** The processes facilitating the development of public infrastructure initiatives must be fair, transparent and efficient. All public infrastructure initiatives should have efficient and fair bidding processes, and contractual agreements that are based on clear, comprehensive guidelines and full public disclosure.

These principles should be considered and explicitly referenced in all infrastructure proposals. The government will evaluate all public infrastructure investment proposals based on the application of these fundamental principles.

1.3 GOVERNMENT PRIORITIES

The Ontario government has established the following five key public-policy priorities:

- Success for Students
- Healthier Ontarians
- Prosperity for People
- Strong Communities
- Stronger Democracy

Public infrastructure investment priorities will be established based on these key public-policy priorities.

1.4 ONTARIO'S INFRASTRUCTURE PLANNING, FINANCING AND PROCUREMENT FRAMEWORK

1.4.1 Overview and Description

This Infrastructure Planning, Financing and Procurement Framework was developed based on consultation with stakeholders and government ministries and agencies to support provincial line ministries, provincial government agencies and broader public-sector partners—municipalities, hospitals, school boards, colleges and universities—to find the best models and apply best practices in delivering public infrastructure initiatives in a transparent, efficient and effective manner.

This framework includes:

- an overview of the Government of Ontario's infrastructure planning process;
- key considerations to be addressed in planning, designing, financing and managing public infrastructure initiatives;
- the roles and responsibilities of government ministries and agencies, municipalities, broader public-sector partners and the private sector in approving and managing the planning, financing and procurement of public infrastructure assets;
- an introduction to infrastructure procurement best practices; and
- an overview of the Government of Ontario's Asset Management Framework.

The Ministry of Public Infrastructure Renewal (PIR) will be developing new tools and supports for public-sector institutions to use in delivering their infrastructure initiatives. These tools and supports in development are identified throughout the framework.

1.4.2 Objectives of the Infrastructure Planning, Financing and Procurement Framework

The key objectives of Ontario's Infrastructure Planning, Financing and Procurement Framework are to:

1. set out guidelines for implementing the government's strategic plan for infrastructure renewal;
2. establish clear rules for infrastructure development by articulating the roles and responsibilities of all partners in building and renewing Ontario's public infrastructure assets;
3. assist Ontario's broader public sector—especially smaller and less experienced partners—in planning, designing, financing and managing public infrastructure investments;
4. support line ministries and government agencies, municipalities, hospitals, school boards, and colleges and universities in developing innovative and creative ways to meet Ontario's infrastructure needs while protecting and promoting the public interest;
5. facilitate the development and sharing of infrastructure planning, financing and procurement best practices across the public sector;
6. support line ministries and government agencies, municipalities, hospitals, school boards, and colleges and universities in effectively engaging the private sector, where appropriate, in building and renewing vital public assets and optimizing public-private collaboration; and
7. encourage capital investment planning that takes into account the ongoing operating costs associated with capital investments to ensure the efficient delivery of public services, increased accessibility for persons with disabilities, reduced public-sector operating expenses and energy conservation.

1.5 APPLICATION

This framework applies to infrastructure initiatives undertaken by:

- Ontario government ministries and agencies; and
- municipalities, broader public-sector partners and public agencies where the province has a material financial interest.

Even where there is no material provincial financial interest, the government strongly encourages municipalities and all other public-sector partners to adopt the guidelines contained in this framework to facilitate their infrastructure planning, financing and procurement activities.

The framework provides guidance for traditional and alternative financing and procurement models, recognizing that the appropriate model for procuring public

assets must be determined on a case-by-case basis. The government understands that there is no one right model for building and renewing Ontario's public infrastructure assets.

Public-sector institutions are encouraged to be innovative and creative in delivering public infrastructure initiatives that focus on providing outstanding public services and choosing the approach that meets the test set out by the Guiding Principles for Planning, Financing and Procuring Public Infrastructure outlined above.

PIR and line ministries will evaluate every infrastructure proposal brought forward by a broader public-sector partner based on the proposal's compliance with the framework, the guiding principles outlined above, and the legislative and regulatory framework governing the proponent.

1.6 ACCOUNTING

Public-sector institutions should follow generally accepted accounting principles (GAAP) or the standards set by the Public Sector Accounting Board (PSAB), where appropriate, when classifying infrastructure-related expenditures for budgeting, accounting and financial statement reporting. Following GAAP or PSAB will provide the public and stakeholders with better information related to value of infrastructure assets and the revenue or benefit they generate, and will more fairly allocate the costs associated with creating the infrastructure assets across generations of users.

The figure below outlines the major types of infrastructure expenditure covered by the Infrastructure Planning, Financing and Procurement Framework and the typical accounting treatment for each:

Figure 1.1 Accounting Treatment by Investment Classification

Investment Classification	Description	Accounting Treatment Guidelines
Maintenance	Maintenance includes the costs of maintaining assets for their intended purpose and service life, and repairs that do not prolong an asset's original life expectancy.	Infrastructure asset-related expenditures that are considered maintenance expenditures should be expensed.
Deferred Maintenance	Deferred maintenance refers to the accumulated value of normally required maintenance investments that have been deferred from prior years. This amount should reflect the amount of investment required to bring the asset into normal operating condition at the beginning of the period (i.e., excluding current-year maintenance investment) to the extent possible.	<p>If the deferred maintenance meets the criteria for rehabilitation and refurbishment, expenditures may be capitalized.</p> <p>If the deferred maintenance meets the criteria for maintenance, expenditures should be expensed.</p>

Rehabilitation and Refurbishment	Rehabilitation and refurbishment are those initiatives that result in any of the following material changes to an existing asset: <ul style="list-style-type: none"> • increased physical output or service capacity; • lower operating costs; • extended life; or • improved output quality. 	Expenditures on rehabilitation and refurbishment initiatives may be capitalized.
Renewal and New Infrastructure Assets	Construction of new assets or the replacement of existing assets.	All direct acquisition, construction and/or development costs related to new infrastructure assets may be capitalized and amortized.

Public-sector institutions with specific questions regarding accounting treatment should consult their accounting professionals.

1.7 EVOLUTION OF THE FRAMEWORK

The framework, and the tools and supports that will be developed to assist in the use of the framework, may be clarified or amended by PIR in response to:

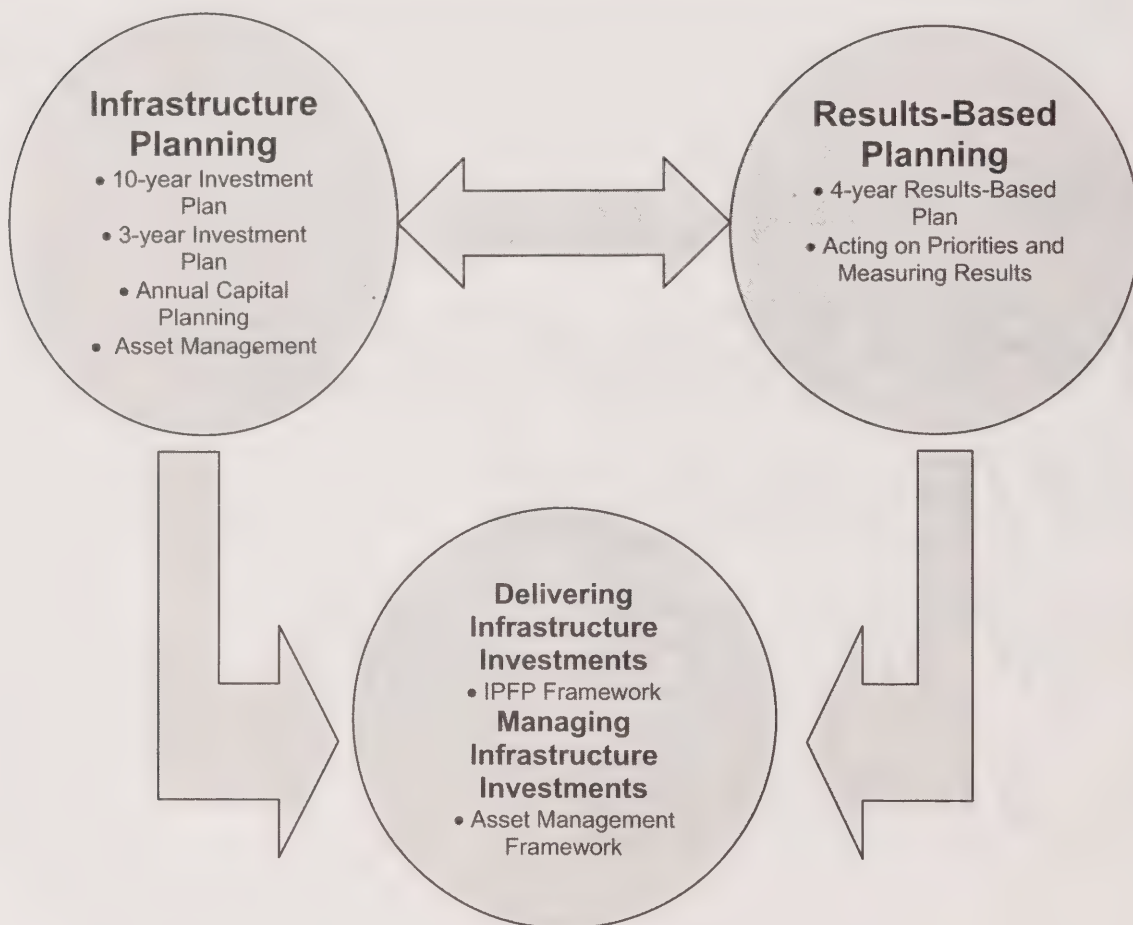
- new requirements of PIR, Management Board of Cabinet or line ministries;
- changes in legislation or regulations governing various areas of the public sector; or
- regular reviews of the framework's effectiveness and relevance by PIR.

PROVINCIAL INFRASTRUCTURE INVESTMENT PRIORITIES AND PLANNING

2.1 INFRASTRUCTURE INVESTMENT PRIORITIES AND PLANNING

Addressing Ontario's infrastructure challenges will require long-term strategic planning focused on setting and delivering on priorities. The government is committed to taking a long-term, systematic approach to planning and delivering public infrastructure.

Figure 2.1—Establishing and Delivering on Infrastructure Investment Priorities



2.2 INFRASTRUCTURE PLANNING

PIR is engaged in leading-edge strategic policy development and analysis for the effective planning and management of provincial infrastructure investments including infrastructure planning and allocation; needs assessment; sectoral infrastructure strategy development; and federal, provincial and municipal partnerships.

PIR is responsible for managing a centralized infrastructure planning process and the strategic management of the government's infrastructure investment plan, including investments in the province's own assets and transfers for infrastructure purposes to broader public-sector partners.

PIR is developing three- and 10-year strategic infrastructure investment plans for Ontario. These plans will set out a comprehensive plan of action for:

- building and modernizing water and wastewater treatment systems and health care and education facilities;
- improving public transit services and co-ordination to reduce gridlock;
- creating new affordable housing units;
- establishing a growth management strategy that encourages good development and discourages sprawl; and
- addressing other strategic infrastructure priorities.

Ministries are being asked, and are in the process of developing, both medium-term (three-year) and long-term (10-year) infrastructure strategies. These strategies will prioritize infrastructure investments and set out a comprehensive and systematic plan for delivering on these infrastructure priorities.

Establishing a long-term strategy for the renewal of Ontario's public infrastructure will ensure that Ontarians have the high-quality public services they need and deserve.

The government's investment plans will be based on the following principles:

- use of infrastructure investment as a catalyst for positive change and an enabling vehicle to achieve government policy objectives;
- long-term planning horizons;
- sound asset management, including life-cycle costing;
- modern controllership and accountability;
- value for money, including needs-based business cases to justify investment;
- collaborative investment by governments and public institutions;
- efficient financing that matches costs and benefits;
- beneficiary or user pay where feasible and in the public interest; and
- innovative engagement of the private sector to leverage expertise and capital.

The infrastructure investment plan will support the government's growth management plan and be focused on results by measuring progress against government objectives. The infrastructure investment plan will fundamentally redefine infrastructure planning by shifting to a long-term planning horizon that is supported by sustainable financing models and sound infrastructure asset-management practices. A long-term vision and plan for infrastructure renewal will also better position the province in negotiating infrastructure funding agreements with the federal government.

2.3 RESULTS-BASED PLAN

The results-based planning process is linked to the budget and priorities of the government. This planning process is focused on rationalizing government policies, programs and services based on the priorities of Ontarians and measuring outcomes. This marks a real change from the ad-hoc and input-driven planning process of the past. Ministries are developing four-year results-based plans that identify how they will contribute to the achievement of the government's key priorities. Ministries' infrastructure strategies will be consistent with the infrastructure component of their results-based plans.

2.4 DELIVERING AND MANAGING INFRASTRUCTURE INVESTMENTS

This framework will guide the Government of Ontario and its public-sector partners in delivering public infrastructure investments in a manner that delivers real value for taxpayers' dollars.

PIR is also developing an asset management and information framework to address inventory, state of repair and future investment requirements with respect to Ontario's infrastructure and to promote asset management best practices in the broader public sector and publicly owned infrastructure (e.g., municipalities, hospitals and universities).

Appropriate approaches to infrastructure planning, financing and procurement combined with sound asset management strategies are critical to allowing the government to make long-term strategic choices with respect to infrastructure investments in Ontario.

INFRASTRUCTURE INVESTMENT PLANNING AND DEVELOPMENT

3.1 INTRODUCTION

A successful infrastructure investment is the product of a well-thought-out and researched plan. This section outlines the essential elements that must be addressed in moving an infrastructure investment initiative forward.

Well-executed planning and research in the early stages of an infrastructure investment initiative have been identified as the key to ensuring that cost estimates are consistent with the size, scope and complexity of an infrastructure initiative and that initiatives are delivered in a timely and efficient manner. Value-for-money objectives are more likely to be achieved if the time is taken to plan upfront, identifying all the risks to a particular initiative and the strategies to manage those risks. Planning can also help to identify all available sources of public and private capital.

3.2 INFRASTRUCTURE PLANNING NEEDS ASSESSMENT

Public-sector partners should be working with their provincial ministry and agency partners and PIR to identify strategic infrastructure investment priorities. To identify such priorities, a needs assessment is required to match service delivery requirements to the type of infrastructure investment needed (e.g., maintenance, deferred maintenance, rehabilitation and refurbishment, or renewal and new infrastructure assets). A needs assessment must consider and provide an analysis of the:

- factors driving need;
- state of existing asset base; and
- future infrastructure asset needs, including maintenance costs, and the funding options available to meet these needs.

Once an initiative has been identified as a priority through the infrastructure planning process, a business case must be developed for delivering the initiative.

A broad range of factors can affect infrastructure needs. The factors driving infrastructure needs should be clearly outlined and articulated by a public-sector entity to the provincial line ministry or agency it reports to and PIR. Some of the most common factors include those listed below.

Figure 3.1 Factors Driving Infrastructure Needs

Factors	Description
Demographics	Entities should consider both current and future indicators, such as population change by age cohort; impacts of births, deaths, immigration and emigration; and issues specific to program areas.
Program Changes	These include new initiatives, program terminations or changes in program parameters.
Technological Changes	Examples include the impact of Web-based technologies on distance learning, new medical technologies on the delivery of health care or e-business opportunities.

Economic or Business Changes	These include current and projected financial or economic/market trends and opportunities—in general or specific to the service sector.
Environmental Factors	These include the impact of any potential changes to environmental standards.
Social Changes	Entities should consider any trends that could affect service delivery needs, including the changing needs of consumers of public services.
Legislation	Factors to consider here include any new statutory requirements affecting the entity.

Unsolicited Proposals

Decisions on infrastructure planning, financing and procurement will be made based on the government's three- and 10-year infrastructure investment plans and its annual infrastructure planning process. Unsolicited proposals should conform to/meet the guidelines in the framework and be forwarded to PIR and the appropriate infrastructure ministry for consideration. To be considered, proposals must be consistent with the strategic priorities laid out in the government's investment plans and meet the tests outlined in the framework.

3.3 BUSINESS CASE

A business case is needed to provide decision-makers with an ability to gauge the viability of an initiative. It also allows the province to assess a proposal against its priorities and the Guiding Principles for Planning, Financing and Procuring Public Infrastructure. The key elements of an infrastructure initiative business case that must be addressed, and will be assessed by the province, include:

- Review of Needs Assessment;
- Strategic Options Analysis and Evaluation;
- Recommended Approach; and
- Proposed Implementation Strategy

3.3.1 Strategic Options Analysis

All infrastructure decisions should be based on meeting service delivery needs and strategic priorities. To assess which strategy can do this most effectively, there is a need to identify which financing and procurement model offers the best value for money and best protects the public interest.

3.3.2 Infrastructure Financing and Procurement Models

A number of infrastructure financing and procurement (IFP) models are available to facilitate the construction and refurbishment of public infrastructure assets. These models vary in the degree and manner of private-sector involvement and the level and

type of risk they aim to transfer to the private sector. At least nine common IFP models can be identified. They are summarized in Figure 3.2 below.

Figure 3.2—IFP Models—Definitions

Model	Description
Traditional Capital Procurement	Following a competitive bidding process, the design and building aspects of an infrastructure asset are contracted out to the private sector at a fixed price that must meet public-sector performance standards. The government or public institution retains ownership. The public sector retains responsibility for ongoing management of the initiative, or may contract out these responsibilities separately. The initiative is funded from general government revenues or debt.
Design-Build	This model is similar to traditional capital procurement except that the design and build functions are combined within a single private-sector entity.
Operation/Maintenance Service/Licence	Public-sector entities enter into agreements with private-sector firms to operate and/or maintain public infrastructure or deliver public services.
Pooled Borrowing	The financing requirements of a group of borrowers are “pooled” together and financed through a special purpose entity. This allows the financing entity to raise funds in the capital markets in a much more efficient manner than individual borrowers would be able.
Finance	An initiative is funded directly by the private sector using mechanisms such as a bond issue by the public entity or a bank loan.
Lease	The government leases an infrastructure asset from the private sector. The arrangement could also involve an agreement for the private sector to operate the infrastructure asset.
Design-Build-Operate	The private sector designs, builds and operates a new facility under an outsourcing arrangement. Ownership of the infrastructure asset and responsibility for financing remains with the public sector.
Design-Build-Finance-Operate	The private sector designs, builds and finances a new asset, typically under a long-term concession agreement. The private sector then operates the asset during the term of the agreement. A long-term lease may be used, with the private sector transferring ownership of the infrastructure asset to the government or the transfer partner at the end of the lease.
Design-Build-Own-Operate*	The private sector designs, builds, finances, owns and operates an infrastructure asset indefinitely or for a fixed period.

*See section 3.3.4.1

These models must be examined on a case-by-case basis guided by the principles for infrastructure renewal articulated by the government. Careful consideration must be given to the appropriate role of the private sector in delivering public infrastructure assets. Engaging the private sector is generally more successful when:

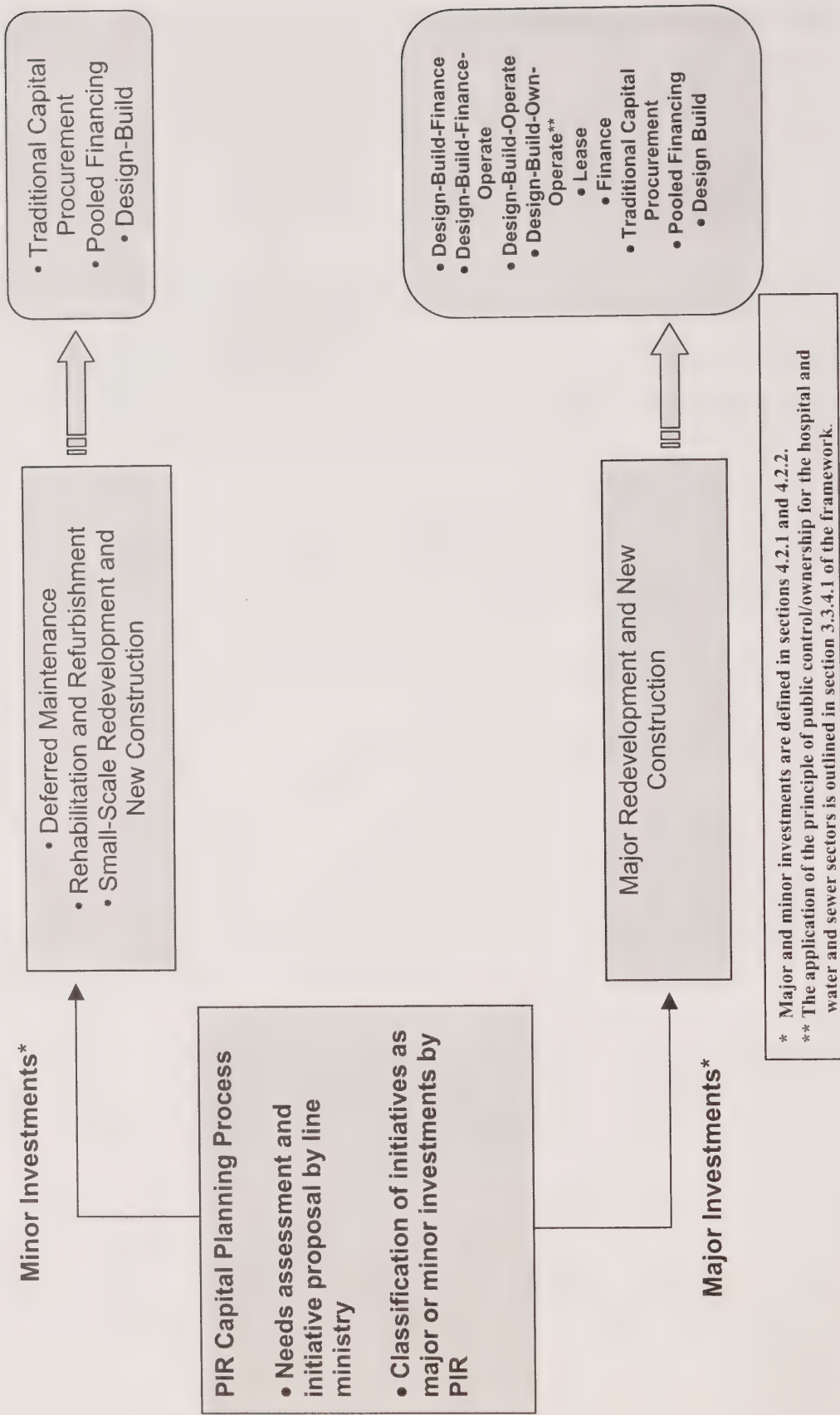
- significant opportunities exist for private-sector innovation in design, construction, service delivery and/or asset use;
- clearly definable and measurable output specifications (i.e., service objectives) can be established, which are suitable for payment on a services-delivered basis;

- a market for bidders can be identified or can be reasonably expected to develop;
- there is potential to transfer real risk to the private sector;
- the private-sector partner has an opportunity to generate non-government streams of revenue (e.g., charge for private access in off-hours); and/or
- initiatives of a similar nature have been successfully procured using a similar method.

The decision tree below (Figure 3.3) provides guidance on the types of infrastructure investment that each model would seem to support based on the size and type of the infrastructure investment. For example, pooled financing would appear to be a useful approach for financing deferred maintenance, rehabilitation or refurbishment, whereas a design-build-finance-operate model would not. The design-build-operate model would seem to be more appropriate for large-scale redevelopment or new construction initiatives.

The criteria outlined in section 3.3.3 will help in determining which financing and procurement model is most appropriate for an infrastructure investment initiative and the role, if any, that the private sector should play in delivering the initiative.

Figure 3.3—Financing and Procurement Models—Applicability



3.3.3 Criteria for Analysing Financing and Procurement Approaches

The following criteria will be considered when examining the various financing and procurement models available to deliver infrastructure initiatives. The government will assess the preferred financing and procurement approach for an infrastructure investment initiative based on the business-case analysis of these criteria.

Criteria	Considerations	Key Issues
Financial	Which model delivers the initiative on the most cost-effective financial terms?	<p>What financing tools/approaches (grants, fundraising, bond financing, pooled borrowing, private equity) are currently available to deliver the initiative?</p> <p>Are there sufficient revenue streams, commercialization opportunities or risks associated with project delivery or operating/maintenance that can support real risk transfer to a private-sector partner to make private financing desirable? This requires analysis from public- and private-sector perspectives.</p> <p>If the private sector can be engaged, is it possible to establish an equitable and effective payment mechanism that provides a reasonable return based on risks assumed, appropriate incentives and controls linked to clear service outcomes?</p>
Technical	<p>What are the key technical issues impacting the initiative?</p> <p>Which model results in technical solutions that meet public service delivery needs?</p>	<p>Can clear and adequate technical specifications for the initiative be established?</p> <p>Does the initiative have technical constraints or risks that are more appropriately addressed by the private sector?</p> <p>If the private sector can be involved, can appropriate mechanisms/measures be established to monitor technical performance?</p>
Operational	What operational issues impact the choice of procurement model?	<p>Must all the operation issues be addressed by the public sector, or can issues be managed by a private-sector partner?</p> <p>Can the government establish clear and measurable operating standards for the private partner? Can the private partner be held accountable for performing those standards?</p>
Public Policy	What public policy/legislative/regulatory constraints exist on the choice of model?	<p>What is the legislative and/or regulatory framework governing the initiative? What constraints does this framework exercise over the initiative?</p> <p>Are there legislative/regulatory/policy constraints on the inclusion of the private sector?</p>

		To what extent do various stakeholders such as public elected officials, service users, employees and government officials accept private-sector involvement?
Implementation	What implementation issues/constraints affect the choice of model?	<p>Is there a strong initiative champion with access to resources needed to make the initiative successful?</p> <p>How does the initiative affect the local community, service users and employees?</p> <p>Can a successful transition plan be developed and implemented to address issues that arise (i.e., labour adjustment, local affordability, etc.)?</p> <p>Is it possible to generate meaningful private-sector interest and competition in the initiative?</p> <p>Is there an impact on other government operations?</p>

3.3.4 Evaluation of Options

Once the strategic options analysis has been completed, it is necessary to evaluate the viable delivery options for the purposes of arriving at a recommended approach.

3.3.4.1 Context Assessment

The evaluation section should include a **context assessment**, describing the most significant features of the overall environment in which the initiative will function (e.g., strategic, market capacity, socio-economic, technical, legal and other factors that may affect the initiative over time).

Water and Sewer Infrastructure

The renewal of Ontario's water and sewer infrastructure is essential to building strong and vital communities. Municipalities seeking to undertake water and/or sewer initiatives should be guided by the following in determining which financing and procurement model meets their objectives:

- The community and key stakeholders should be consulted during all phases of the initiative; and
- The model must ensure that public ownership, control and accountability are maintained.

Municipalities may engage private firms to operate their water and/or sewer infrastructure.

Health Care

The government believes that it is important to state from the outset where it stands on protecting and promoting the public interest in terms of the financing and procurement of hospitals. Hospital infrastructure investments should be guided by the following in determining which financing and procurement model meets their objectives:

- The community and key stakeholders should be consulted during all phases of the initiative; and
- The model must ensure that public ownership, control and accountability are maintained.

Elementary and Secondary Schools

The government believes that it is important to state from the outset where it stands on protecting and promoting the public interest in terms of the financing and procurement of publicly-funded schools.

- Models for financing and procuring publicly-funded schools must ensure that public ownership, control and accountability are maintained.

3.3.5 Value-for-Money Assessment

The evaluation process must include a value-for-money assessment of the options. In the broadest sense, the option providing the best value for money is the one that uses the fewest resources to achieve desired service outcomes. Relative value is determined through a rigorous examination of service delivery options and business-case analysis, considering a broad range of factors including service levels; cost; promotion of growth and employment; environmental considerations; and other health, safety and economic issues.

With the introduction of accrual-based accounting for the province's finances, accounting considerations are no longer a driver of the model to be used for delivering infrastructure investments. The choice of model must be driven by economic considerations such as the efficient allocation of construction; financial and technical risks; effective project management; accountability; and financial discipline.

A value-for-money assessment must consider the quantitative factors to which a dollar value can be assigned, such as initial capital costs, operating and maintenance costs over the life of an initiative (adjusted for risks), and ongoing operating costs related to service delivery (including energy costs).

Quantitative factors also include those that can be quantified but are difficult to accurately translate into monetary terms. Examples may include the number of indirect

jobs created by an initiative, the potential for broader economic stimulus, the level of measurable environmental benefits or the number of people served within a given timeframe.

3.3.5.1 Public-Sector Comparator

PIR, in consultation with line ministries, will develop risk-adjusted public-sector comparators to use as the basis for demonstrating value for money. The key components that will be considered in a public-sector comparator are capital costs and receipts, recurrent costs and receipts, and sensitivity analysis.

Capital Costs and Receipts

Base capital costs will include:

- land acquisition;
- site remediation prior to construction;
- design;
- construction;
- interior fittings and furniture;
- communications and information technology;
- energy systems;
- removal costs; and
- make-good charges that apply at the end of an initiative.

Base capital receipts will include:

- the sale of property associated with an initiative; and
- the residual value of property at the end of an initiative.

Recurrent Costs and Receipts

Base recurrent costs will include:

- salaries and associated costs for employees providing ancillary services (such as cleaning, maintenance and security);
- energy costs;
- insurance;
- government taxes, fees and charges;
- maintenance; and
- planned replacements.

Base recurrent receipts will include:

- rental income; and
- fees and charges for services provided.

Sensitivity Analysis

The public-sector comparator will be expressed in terms of net present value over the life of a proposal. The net present value of the comparator will be tested for changes in critical parameters (i.e., discount rate, interest rate, inflation rate, revenue growth, cost escalation, etc.).

3.3.6 Risk Assessment

Every infrastructure initiative carries a certain level of risk that must be identified and managed effectively throughout the initiative's life. Life-cycle cost is just one of many factors that agencies should consider in assessing levels of initiative risk. Other factors include the initiative's complexity, the entity's experience with similar types of initiatives and the nature of any technology involved.

Before risk can be allocated to any party, it is critical to understand and assess the risk involved in each initiative. Risks should be identified at the earliest stage of planning as they may impact financing and procurement options.

Once risks have been identified, they must be analysed and evaluated to determine the likelihood, consequences and level of risk. Finally, a risk management and/or mitigation strategy must be put in place.

Risks should also be reviewed and updated as the initiative moves forward.

3.3.6.1 Infrastructure Investment Risk Categories

Figure 3.4 below provides examples of the risk categories that should be considered when planning and managing infrastructure expenditures. It also provides examples of how these types of risks may be treated to reduce the likelihood or consequences of potential loss events.

It is important to address these categories—and develop targeted treatments to address the specific risks unique to each initiative—to ensure best management practices. The categories listed here are among the more common in assessing the risks associated with infrastructure investments.

Figure 3.4 – Sample Risk Categories and Treatment

Risk Category	Description and Treatment
General Risks	Examples include high-level concerns related to the decision to undertake an initiative. Risk treatment may include documenting how an initiative fits with established strategic objectives; assessing the requirements for a new corporate structure; enhancing the initiative's profile with the public, media and governments; and working collaboratively to enhance labour and industrial relations.
Policy Risks	Examples include the likelihood that an initiative represents, or may be affected by, a major shift in government or agency policy, or change in legislation.
Public Interest Risks	Examples include the initiative's environmental impact and its relation to public health, safety and security issues. Risk treatment may include working with neighbours and the community to address public concerns in the initiative planning phase.
Management or Organizational Risks	Examples include the complexities associated with partnerships, investments and management. Risk treatment may include managing dependencies on linked funding and contingent investments; ensuring the availability of qualified initiative managers; and ensuring the initiative development team has access to appropriate expertise when undertaking a new type of initiative.
Design/ Construction, Commissioning, Partnership or Supplier Risks	Examples include sponsor risk (e.g., the likelihood that a private partner may be unable to deliver) and general supplier/market capacity. Risk treatment may include ensuring the availability of material and equipment supplies; ensuring that experienced designers, contractors and trades are available in the required time frame; anticipating the need for community permits and approvals; and designing construction windows to avoid delays due to adverse weather.
Site Risks	Examples include the risks associated with site selection and acquisition. Risk treatment may include ensuring that the site is available at an affordable price; evaluating site challenges such as soil contamination or potential flooding; and ensuring the desired site is free of potential land-claim issues.
Financing Risk	Examples include an entity's ability to draw the required financial resources and the overall financial viability of the initiative. Risk treatment may include ensuring that financing is available at the appropriate time; anticipating the impact of interest rate increases; and evaluating the creditworthiness of potential partners.
Cost, Economic or Market Risks	Examples include all possible events that could affect cash flow during initiative development. Risk treatment may include planning for contingencies in the market such as a drop in demand for services; anticipating the potential for labour or material cost escalations; ensuring funding is available to cover operations, maintenance and administration; and assessing the potential for competing facilities.
Ownership and Operations Risk	Examples include labour relations, maintenance, technical and asset obsolescence risks. Risk treatment may include taking steps to keep maintenance in line with forecast levels and taking appropriate measures to address the likelihood of abandonment.
Other Risks	Risks that could be substantive and require resolution and/or management prior to commitment to the expenditure, or during delivery, including uncontrollable "force majeure" risks such as weather and global uncertainty. Risk treatment may include developing contingency plans to avoid or reduce construction delays due to emergencies or disasters; and ensuring that business continuity plans address a wide range of potential events.

BC Capital Asset Management Framework.

3.3.6.2 Assignment of Risk

Once the risks associated with an initiative have been assessed, these risks should be assigned to the entity best able to manage them most cost-effectively. Almost any risk can be transferred, if the proponent is willing to pay for this risk transfer. Decisions related to which risks an entity will retain and which it will transfer will dictate to some degree which financing and procurement model an entity may use to develop its infrastructure initiative.

The following chart can assist in allocating risk between/among potential initiative partners.

Figure 3.5 – Risk Assessment Guide

RISK	APPLICABLE TO THIS INITIATIVE?		WHO ASSUMES THE RISK?	
	Yes	No	Private Sector	Public Sector
Policy Risks				
Change in government policy				
Change in legislation				
Site Risks				
Appeal of legal ownership of the site or rights of way				
Above market acquisition price				
Unexpected due-diligence costs				
Cannot secure financing for the acquisition of the site				
Previously undiscovered environmental problems				
Previously unknown geotechnical stability concerns of the site				
Increased costs in municipal applications				
Higher-than-expected municipal requirements to rezone the site				
<i>Delays</i> Longer-than-expected time to find appropriate site, close purchase or municipal process Land assembly increases the probability of delays occurring				
Design Risks				
Scope creep—wrongly specified requirements or misinterpretation of design				
Mechanical, electrical and Heating, Ventilation and Air Conditioning (HVAC) systems are not designed according to sponsor's specifications				
Default of consultants				

RISK	APPLICABLE TO THIS INITIATIVE?		WHO ASSUMES THE RISK?	
	Yes	No	Private Sector	Public Sector
Construction Risks				
Higher material and labour costs due to inflation				
Construction delays—labour strikes, shortage of labour, scheduling, weather, safety violations, delay in receipt of material				
Construction takes longer than expected (due to poor understanding of construction process)				
Default of contractor risk				
Subcontractor risk—associated with a default by a subcontractor—will need to make emergency provisions and additional costs in finding replacement				
Higher-than-market construction costs				
Liability Risks				
Legal liability of ownership				
Operations Risks				
Higher-than-projected operating costs—due to error in estimates used in pro forma				
Higher operating costs due to inflation—utility and maintenance				
Occupancy risk—lower or higher requirements				
Higher asset management and overhead costs				
Default of property management				
Disruption of building use due to unforeseen circumstances— <i>force majeure</i> , equipment failure or utility stoppage				
Capital Repairs				
Capital maintenance of building structure and systems				
Overlooked design, construction and manufacturing defects or design elements cause unexpected problems				
Periodic maintenance not performed when appropriate, which increases probability that the building underperforms (higher utility costs) and the residual value depreciates more than if it was properly maintained				
Technology changes impacting delivery of building automation systems				
Legislative and/or government occupancy requirements (i.e., accessibility) may lead to changes to the tenant improvements or base building				
Investment Risks				
Tenant default				
Releasing/vacancy risk at end of term				
Market conditions change, affecting market value of the property				
Expropriation				
Interest rate increases or fluctuations				

RISK	APPLICABLE TO THIS INITIATIVE?		WHO ASSUMES THE RISK?	
	Yes	No	Private Sector	Public Sector
Financial structure risk				
Residual value—uncertainty of the value of the physical asset at the end of 20/25/30 years				
Other Risks				
Re-leasing risk at the expiry of the lease				
Default of developer/investor				
Higher corporate, capital or other taxes or entity (such as a pension fund or not-for-profit entity) becomes subject to taxes				

3.3.7 Recommended Approach

This section should describe the **preferred solution**, including:

- its major features;
- consistency with government priorities and Guiding Principles for Planning, Financing and Procuring Public Infrastructure;
- its technical scope (defining technical features and an explanation of how the proposal differs technically from other options); and
- financial information, including a year-by-year breakdown of forecast costs, revenues and funding sources for the asset's full, risk-adjusted life cycle.

A **rationale for the preferred solution** should be based on the earlier evaluation of options with explicit reference to implications relative to risks and the selection criteria used.

This section should also include a description of **authorities sought**, including at minimum a summary of recommendations to key senior decision-makers and potential funding agencies, and a list of all authorities and decisions being sought from senior decision-makers.

3.3.8 Proposed Implementation Strategy

This section describes the key features and steps necessary to ensure that a project is delivered on schedule and on or under budget—including:

- **management and governance structure** (during implementation and operational phases);
- **scheduled milestones and deliverables** (e.g., time targets for major phases);
- **monitoring and control systems** (e.g., for variances from approved scope, targets, budget, etc.);

- risk management strategy (including risk mitigation/treatment, control and monitoring);
- procurement strategy (e.g., proposed financing sources, procurement delivery models, etc.);
- range of performance targets (outputs and outcomes expected); and
- consultation/communications (at least from announcement of a decision through to commencement of operations).

3.4 PROJECT FINANCING TOOLS TO SUPPORT MODELS

Financing considerations are inherent in the models outlined earlier in this section. A number of additional financing tools have been used more extensively in other jurisdictions, including:

- Tax Increment Financing: Special levies or the incremental increase on taxes or user charges are used to fund infrastructure investment.
- Value Captured Charges: Incremental revenue from a specific geographical site is relied upon as security for financing (incremental revenue associated with assessment growth).
- Revenue Bonds: Bonds are secured by a dedicated revenue stream (e.g., tolls, rentals, user charges, etc.). Revenue bonds reduce the reliance on general obligation debt, which has the benefit of not increasing the debt burdens on government or public-sector entities.
- Dedicated Taxes: New taxes, or portions of existing taxes, are earmarked for specific programs or initiatives. For example, the provincial and federal governments have committed to sharing portions of their respective gas taxes to support public transit and other critical public infrastructure.

The experience in Ontario with these financing tools has been fairly limited. For some of these tools, the statutory authority to utilize them is not currently in place. PIR will review and further explore these financing tools and their applicability to infrastructure renewal in Ontario.

3.5 POST-IMPLEMENTATION REVIEW

Within 12 months of completing a major infrastructure initiative, PIR will conduct a review to ensure that desired outcomes and outputs were delivered and expected financial outcomes are being realized. The focus of the review will include:

- initiative objectives and consistency with Guiding Principles for Planning, Financing and Procuring Public Infrastructure;
- consultation with community and key stakeholders;
- appropriate approvals;
- output delivery;

- risk allocation;
- delivery times;
- budget performance;
- adequacy of infrastructure in meeting public service delivery needs; and
- initiative operations.

The objective of the post-implementation review is to identify both the positive and negative aspects of an initiative and assess whether value for money was, or will be, achieved. The lessons learned will be invaluable to delivering future initiatives and establishing best-practice precedents.

3.5.1 Post-Implementation Review for Minor Infrastructure Initiatives

For minor infrastructure initiatives, PIR may direct line ministries and their partners to undertake a post-implementation review that addresses the key elements listed above.

ROLES, RESPONSIBILITIES AND APPROVALS PROCESS

4.1 INTRODUCTION

This framework applies to all public infrastructure investment and procurement undertaken by the Government of Ontario and its broader public-sector partners where there is a material Provincial financial interest.

This framework document should be read in conjunction with other guidelines on infrastructure initiative investment, delivery and procurement published by PIR, the Ministry of Finance and Management Board Secretariat.

This framework aims to assist public-sector managers in dealing with infrastructure initiatives. At the same time, it will provide external stakeholders with clarity regarding the government's approach to meeting its public infrastructure investment needs.

It is recognized that there are some areas of infrastructure and ancillary service delivery where the private sector has advantages over the public sector, and vice versa. This is particularly pertinent with respect to risk management and the associated costs of risk transfer. As an example, the private sector can more aptly manage commercial risk whereas the public sector is best positioned to manage regulatory risk.

The Government of Ontario, through PIR, seeks to leverage and optimize the strengths and skills of each sector.

The framework aims to bring governments, municipalities, public-sector transfer partners and the private sector together to achieve:

- greater infrastructure investment;
- greater use of full cost recovery in certain sectors (e.g., water and wastewater)
- non-traditional revenue/funding sources to support infrastructure investment;
- financing approaches that are consistent with the amortization of capital costs;
- innovative opportunities for private-sector involvement; and
- procurement and management practices that ensure "value for money."

The government and broader public sector will establish infrastructure investment priorities, as well as evaluate and assess applicable models and approaches to infrastructure financing and procurement. The government and broader public sector will collaborate with the private sector on the implementation of infrastructure investments.

It is the government's goal to develop a centre of expertise within the public sector that can be applied to support, manage and lead a range of public infrastructure investment approaches.

4.2 ANNUAL INFRASTRUCTURE PLANNING

PIR is responsible for managing the centralized infrastructure planning process and strategic management of the government's infrastructure investment plan, including investments in the province's own assets and transfers for capital purposes to the broader public sector. PIR is accountable for delivery of the province's infrastructure investment priorities.

Individual ministries of the Government of Ontario are responsible for developing an annual Infrastructure Strategy and Asset Management Plan consistent with PIR infrastructure planning guidelines. Cabinet will approve all Infrastructure Strategies and Asset Management Plans.

All infrastructure investment priorities, including deferred maintenance, rehabilitation, redevelopment and renewal, will be identified by ministries in their infrastructure plans.

For the purposes of understanding the roles and responsibilities of various partners and the approvals process, infrastructure investments will be classified as major or minor initiatives. Major and minor initiatives will be subject to different processes under this framework.

4.2.1 Major Investments

A major investment is a redevelopment, new construction or bundled initiative with the size, scope, complexity and potential for alternative delivery models. Classification of an initiative as a major investment will be done by PIR through the capital planning process.

4.2.1.1 Process for Delivering Major Investments

For major investments, PIR will be responsible for the evaluation of financing and procurement models, overseeing project implementation, management responsibilities, and progress/status reporting consistent with the Infrastructure Planning, Financing and Procurement Framework.

Line ministries will continue to be responsible for ensuring that policy and program standards are appropriately addressed at all stages of initiative development and for liaising with public-sector proponents.

PIR may establish initiative teams to assist in the planning, development and implementation of specific major initiatives. Initiative teams will include representatives from PIR, central agencies and the line ministry with primary responsibility for a major initiative.

4.2.2 Minor Investments

A minor investment would include deferred maintenance, rehabilitation or refurbishment, small-scale redevelopment or new construction initiatives that do not have the scale, scope, complexity and potential for alternative delivery models.

The planning and development process for minor initiatives will be directed through the capital planning process.

4.3 GENERAL OVERVIEW OF ROLES AND RESPONSIBILITIES

4.3.1 Ministry of Public Infrastructure Renewal

PIR is the central agency responsible for ensuring co-ordinated and integrated strategic infrastructure planning and allocations, linking policy and capital and operating financial decision-making.

PIR will be the repository of the government's expertise in the area of infrastructure financing, capital procurement, initiative management, related financial analysis and asset management.

PIR will act on the government's commitment to:

- improve and renew Ontario's aging infrastructure;
- deliver government priorities;
- improve the infrastructure planning process for government ministries, resulting in clear choices about strategic infrastructure investments;
- establish new opportunities to improve, change and transform the delivery of public services through creative and innovative infrastructure investments; and
- create new financing solutions.

PIR will be responsible for providing central agency oversight, evaluation and recommendations with respect to financing and procurement proposals for major and minor infrastructure investment initiatives.

For major investments, PIR will be responsible for the evaluation of financing and procurement models, overseeing project implementation, management responsibilities, and progress/status reporting consistent with the Infrastructure Planning, Financing and Procurement Framework.

PIR will also be responsible for ensuring that infrastructure investment is consistent with developing and implementing the government's growth management strategy.

4.3.2 Ministry of Finance

The Ministry of Finance will be engaged in the following ways concerning infrastructure initiatives:

- assessing implications on the overall provincial fiscal plan;
- assessing implications on the debt management plan and credit ratings;
- taxation; and
- controllership and accountability.

4.3.3 Management Board Secretariat

Detailed financial aspects of annual infrastructure plans, including the linkage of capital and operating expenditures, will continue to be assessed and approved by Management Board of Cabinet.

Management Board Secretariat also issues policies and guidelines for the procurement of goods and services by government ministries and agencies.

4.3.3.1 Ontario Realty Corporation (ORC)

ORC's mandate is to provide a broad range of real estate services including construction project management, facilities management, portfolio management and asset rationalization on behalf of Management Board Secretariat and its client ministries. ORC will:

- assist PIR in the planning, review and assessment of infrastructure of Ontario government ministries;
- assist PIR and Ontario government ministries in infrastructure planning for government facilities;
- provide procurement advice and expertise to Ontario government ministries and broader public-sector partners; and
- undertake, as service provider for Ontario government ministries, construction, leasing or other projects on behalf of ministries.

4.3.4 Line Ministries

Line ministries will continue to be responsible for setting standards for their programs; identifying and prioritizing infrastructure needs within their sectors and area of responsibility; and preparing infrastructure investment plans consistent with PIR direction.

Line ministries will work with PIR, public-sector proponents and other partners in the planning and development of infrastructure investment initiatives, ensuring that policy and program standards are appropriately addressed at all stages of initiative development.

4.3.5 Municipalities

Municipalities are responsible for delivering programs and services consistent with their authority/responsibility as defined under the *Municipal Act*. Where the province has a material financial interest in municipal infrastructure investment initiatives, municipalities must comply with this framework.

4.3.6 Transfer Partners

Transfer partners are responsible for delivering programs consistent with their mandate, the ministries' strategic direction and the legislative and regulatory framework governing their activity (e.g., *Public Hospitals Act*). Transfer partners that are, or will be, consolidated with the Province of Ontario's public accounts must comply with this framework.

4.4 PRIVATE SECTOR

The government will pursue innovative methods of engaging the private sector wherever it is consistent with this framework. The role of private-sector partners will be determined by the choice of infrastructure investment and financing and procurement delivery model on a case-by-case basis. In short, the private sector is likely to be involved in either or both of the following two aspects of public infrastructure delivery:

1. provision of external expert advisory services to government or a broader public-sector entity; and
2. provision of service or finance for an initiative.

The government envisages the private sector taking a lead role in the following areas: overall procurement management of major infrastructure initiatives; sourcing and managing initiative finance; management of infrastructure assets; and providing services associated with specific infrastructure.

The private sector already performs a lead role in project advice and the design and construction of major infrastructure assets.

4.5 OVERVIEW OF PLANNING, DELIVERY AND POST-IMPLEMENTATION PROCESSES

There are several key stages in the planning, development and implementation of major and minor infrastructure initiatives. Below is a general overview of that process. The precise manner in which initiatives will be planned, delivered and implemented will likely vary, depending on the nature of the initiative and the capacity/expertise available in the relevant line ministry. But, in all instances, the process will be consistent with the principles of streamlined decision making.

Step 1 Needs Assessment

- Government ministries, municipalities and broader public-sector partners will identify infrastructure needs and proposals.
- PIR will work with government ministries to develop both three-year and 10-year infrastructure investment plans identifying initiatives to be delivered based on the needs identified by line ministries and the government's priorities.

Step 2 Annual Infrastructure Planning

- Line ministries will identify priority investments in their annual infrastructure strategies and asset management plans.
- PIR will work with line ministries to ensure that identified investments are consistent with government priorities and to further prioritize investments where necessary.
- Line ministries will, with guidance from PIR, develop a business case for each priority investment, including a preliminary financing and procurement approach.
- PIR will recommend the annual capital plan to Cabinet for approval, including proposed financing and procurement approaches for identified initiatives.

Step 3 Selection of Financing and Procurement Approach for Major Investments

- The Minister of PIR, in consultation with the appropriate line minister, will provide direction on the final financing and procurement approach for major initiatives, based on advice from PIR staff.

Step 4 Delivery

- Line ministries, or the ORC on behalf of line ministries where it acts as project manager, will have primary responsibility for project delivery.
- PIR will co-ordinate a project delivery team where the line ministry has insufficient capacity/expertise, or where innovative financing and procurement models are being used.
- Line ministries, or the ORC on behalf of line ministries, will provide PIR with regular project status reports.

Step 5 Post-Implementation Review

- PIR will co-ordinate a post-implementation review of all major initiatives in order to identify their successes and failures and to ensure that value for money was achieved.

TRANSPARENCY AND ACCOUNTABILITY

5.1 PUBLIC COMMUNICATIONS

In keeping with the government's commitment to transparency and public accountability, the province will strengthen communications with stakeholders and the public, telling them how and where tax dollars are being invested to renew Ontario's public infrastructure assets. Municipalities and all broader public partners are also required to be transparent and accountable and should develop basic corporate communications and stakeholder/community outreach plans that identify opportunities and strategies for:

- announcing key milestones in infrastructure investment life cycles;
- informing stakeholders and local communities about an investment's consistency with Ontario's Guiding Principles for Planning, Financing and Procuring Public Infrastructure, objectives and impacts on the community (e.g., job creation, improved program/service delivery); and
- co-ordinating all communications with respect to a given investment with the provincial ministries responsible and/or central government agencies.

PIR's communications branch will provide communications planning support to the government with respect to infrastructure planning, financing and procurement. Infrastructure ministries will be responsible for specific communications requirements around individual initiatives falling under their scope of responsibility.

5.2 GUIDELINES

Municipalities and broader public-sector partners should work with their communications staff and, where appropriate, the responsible provincial ministry to develop a communications plan and guidelines for:

- determining which types of infrastructure expenditures are suitable for public announcement;
- engaging key stakeholders and the public in the progress of the initiative;
- ensuring that necessary approvals are in place prior to initiating public announcements;
- determining who is responsible for making public announcements and in what circumstances;
- co-ordinating announcements with involved partners such as private-sector companies;
- co-ordinating announcements with the appropriate ministries and/or central provincial government agencies; and
- identifying key investment milestones (e.g., pre-feasibility studies, approval, design, issuance of a Request For Proposals, start of construction, start of service delivery) or criteria to inform the timing and scope of public announcements.

5.3 COMMUNITY AND STAKEHOLDER ENGAGEMENT

It is good practice for provincial ministries/agencies, municipalities and broader public-sector partners to engage the public and stakeholders early in the development of public infrastructure investment plans and to continue to engage them throughout the process. Open and honest communication and engagement can build local support for investment and can improve the ability of the proponents to design, build and maintain public infrastructure initiatives that deliver the high-quality services Ontarians need and deserve. Opportunities for engaging the public and stakeholders should be identified in an organization's communications plan.

5.4 ANNUAL REPORTING ON INFRASTRUCTURE INVESTMENTS

Reporting and monitoring are essential to accountability, and to effective risk and cost management.

Line ministries (with the assistance of public-sector partners) will be required to report annually on the progress of major infrastructure investments under their responsibility or oversight through the government's capital planning process.

Figure 5.1 below highlights and describes reporting requirements that should be addressed, consistent with the parameters set out in the capital planning process, by line ministries and public-sector partners in reporting on the progress of major infrastructure investments.

Figure 5.1—Reporting Requirements

Reporting Requirement	Description
Scope	<ul style="list-style-type: none">• Describe the investment and its development within parameters of approved scope• Update existing or potential risk(s) and actual or proposed mitigation plans
Schedule and Financial	<ul style="list-style-type: none">• Investment's start and forecast completion date• Cumulative spending for most recent fiscal year and spending to date• Actual costs versus forecasted costs and reasons for any material variance
Public and Stakeholder Consultation	<ul style="list-style-type: none">• Status report on public and stakeholder consultations and timing and rollout for future consultations• Report should highlight any material concerns expressed by the public and/or key stakeholders in the development of an investment
Other Critical Business-Case Elements	<ul style="list-style-type: none">• PIR may direct the line ministry to report on progress of specific business-case elements

PIR will compile an *Ontario Infrastructure Investment Report* to be made public on an annual basis on PIR's Web site. Commercially sensitive information contained in the post-implementation reviews will be protected. Regular annual reporting on where and how infrastructure investments are being made will ensure a level of transparency and accountability that will increase public and stakeholder confidence in the renewal of Ontario's public infrastructure assets.

5.5 POST-IMPLEMENTATION REVIEW

PIR will release the post-implementation reviews for major investments (and others where directed). Commercially sensitive information contained in the post-implementation reviews will be protected.

PROCUREMENT BEST PRACTICES

6.1 PROCUREMENT BEST PRACTICES OVERVIEW

The experiences of other public-sector institutions in Ontario and jurisdictions in North America and around the world can provide invaluable knowledge and insight on how to better procure public infrastructure assets. During consultations, stakeholders frequently noted the lack of available best-practices information for Ontario-based public infrastructure development. This is a function of two issues: 1) the absence of a co-ordinated and ongoing collection and analysis of intra- and inter-jurisdictional public infrastructure initiatives; and 2) the relative inexperience of Ontario's public sector in using non-traditional models for procuring public infrastructure assets.

The government, through PIR, is committed to researching, analysing and making widely available best-practices information and supports. PIR will develop a Virtual Centre of Infrastructure Best Practices for public infrastructure renewal. This interactive Web site will provide one-window access to best-practices information for the broader public sector, and will also include the tools and supports being developed to assist public-sector partners in effectively using the guidelines set out in this framework.

6.2 PRINCIPLES

In accordance with the principles and priorities set out in this framework, the following principles guide all public-sector infrastructure procurement:

- Procurement processes must be fair, open and transparent to ensure the integrity of the process.
- Infrastructure procurement opportunities must be tendered publicly, using competitive processes. Only in unusual circumstances, such as in matters of urgent public health and safety, can reasonable exceptions be made.
- Procurement processes should support the efficient and cost-effective participation of bidders to manage costs to the public infrastructure initiative proponents.
- Procurement decisions must be based on value-for-money assessments, with the protection of the public interest being paramount.
- Procurement strategies should allocate risks to the party that is best able to manage them.

6.3 NEEDS IDENTIFICATION

In planning procurement, ministries/agencies, municipalities and broader public-sector partners (referred to in this section collectively as "proponents") should:

- at the outset, list all the skills inputs required during procurement;

- consult with other departments and organizations that have carried out similar initiatives, to assess whether all the inputs that they may need have been identified;
- identify the in-house expertise available for the initiative before considering the role to be played by external advisers. This way, proponents will avoid appointing external advisers who replicate what is already available or appoint an overqualified organization for relatively routine functions;
- ensure there is an open and fair process for the selection of external advisers;
- in retaining external expertise, consider opportunities to transfer skills so that in subsequent procurements, there is less dependence on external advisers; and
- appoint an initiative manager and decide on an initiative management structure and membership at the outset.

6.4 PROCUREMENT PLANNING

The primary consideration in the choice of a procurement strategy is the need to obtain overall value for money and ensure that the strategy adheres to the government's Guiding Principles for Planning, Financing and Procuring Public Infrastructure. Procurement planning will be affected by the size and scale of an infrastructure initiative.

Proponents should prepare a procurement plan outlining the proposed implementation strategy, including:

- how the initiative will be implemented;
- the initiative milestones and timeframe;
- the roles and responsibilities for managing the implementation;
- the procurement management structure;
- the resources and skills required, including the estimated costs of external advisers; and
- the protocols or procedures for initiative documentation, information control, the handling of confidential information and decision-making.

6.5 APPOINTMENT OF EXTERNAL ADVISERS

Before appointing any external adviser, proponents must ensure that there are no existing or potential conflicts of interest. Proponents should also obtain adequate confidentiality undertakings from external advisers to the effect that any information available to them during the procurement process will not be used in the context of any other exercise (e.g., assistance to a potential bidder for the main contract in a subsequent competition).

It is important when selecting advisers to give them as much information as is reasonable, and to define roles and tasks as clearly as possible. This information

needs to cover the nature of the assistance sought in terms of advice, support, review and responsibility for the process.

6.6 ROSTER OF EXPERTISE

To assist proponents in retaining necessary expertise, PIR intends to develop and maintain a roster of advisory firms to select from when undertaking a particular infrastructure procurement initiative.

The roster will be based on an open process to identify expertise. Once complete, ministries/agencies, municipalities and broader public-sector partners will be able to access specialist firms more efficiently, thereby avoiding a lengthy and expensive Request For Qualifications (RFQ) process for each potential transaction. This approach reduces red tape, streamlines a multi-stage process and speeds completion.

6.7 RISK MANAGEMENT

6.7.1 Risk Management Overview

Risk management is a continuous, forward-looking process of identifying risks, assessing exposures and developing appropriate action plans to ensure they are managed in a way that will enable an organization to meet its business objectives.

A continuous risk management approach is applied to effectively anticipate and mitigate the risks that have critical impact on the initiative. It also plays a key role in supporting effective decision-making and strengthening accountability. Effective risk management includes early and aggressive risk identification through the collaboration and involvement of relevant stakeholders.

6.7.2 Standard Risk Management Process

Risk identification should be an organized, thorough approach to seek out probable or realistic risks in achieving objectives. To be effective, risk identification should be an attempt to address probable events. PIR will develop a comprehensive risk management guide for public-sector institutions to use in the planning of their infrastructure initiatives.

6.8 STANDARDIZATION

The government is committed to the development of standard processes and documentation for infrastructure initiatives. The development and appropriate use of standard contract clauses is a means of delivering value for money. The objectives of standardization are to:

- reduce the period and costs of negotiation;

- promote a common understanding of the major risks in various procurement approaches; and
- provide a consistent approach to procurement.

It is recognized that there needs to be flexibility in the negotiation of terms and conditions, particularly for complex procurements, where a “one-size-fits-all” approach is inappropriate. For this reason, standard contract clauses may need to be supplemented by specific contract clauses where necessary.

Recognizing the need for work in this area, PIR, in consultation with other ministries, government agencies and key stakeholders, intends to develop standard documentation to support ministries/agencies, municipalities and broader public-sector partners at every stage of the infrastructure procurement process. Products will include standard templates for Requests For Expressions of Interest (RFEI), Requests For Qualifications (RFQ), Requests For Bids/Proposals (RFB/P), risk management materials and vendor contracts.

6.8.1 Standardized Build Specifications

PIR will also engage in discussions with line ministries and key stakeholders on the development of standard build specifications for various infrastructure initiatives (e.g., hospitals). Establishing standard build specifications can lead to cost efficiencies associated with more efficient bidding processes and improved timelines for initiative delivery.

6.9 MAJOR INVESTMENT PROCUREMENT BEST PRACTICES

This section identifies best practices for delivering large-scale infrastructure redevelopment or new construction initiatives. Proponents may wish to adapt elements of this section for use in delivering smaller-scale infrastructure initiatives.

6.9.1 Project Management Structures

Infrastructure initiatives require a team-based management approach to ensure all the required skills are applied effectively. Higher-risk initiatives and those using new or relatively new alternative procurement strategies will require a greater degree of formal initiative management structure compared to more routine or lower-risk initiatives.

6.9.1.1 Project Charter/Terms of Reference

A project charter is often used in managing relatively complex initiatives. The charter is a document setting out the nature of the initiative, objectives, responsibilities of the parties, roles, reporting relationships, etc. In sum, the charter’s purpose is to ensure

that all parties fully understand the initiative and their respective roles and responsibilities.

6.9.1.2 Steering and Technical Committees

For major projects, a steering committee should be established by the proponent. A steering committee serves to guide the planning and implementation of the project, including addressing and providing direction on all key issues. Proponents might also consider, depending on the size and complexity of the project, additional project management committees. For example, technical committees (e.g., design, legal, financial, etc.) may be used to serve in either an advisory or evaluative capacity.

6.9.1.3 Project Manager

Proponents need to appoint a project manager. The project manager is responsible for delivering the project and managing members of the project team, including external advisers and consultants. The project manager requires a good understanding of government processes and excellent business skills for negotiating and developing the project arrangement.

The proponent's relationship with the project manager will require careful development within the following guidelines:

- no matter how much responsibility is delegated to the project manager, proponents retain ultimate authority and therefore must have adequate knowledge and information about the project to be able to exercise that authority properly;
- proponents need to make clear to the project manager the precise extent of any delegated authority together with those decisions reserved to the project proponent; and
- formal communication between the proponents and consultants/advisers should be routed through the project manager.

Where entities lack internal project management expertise or where the project manager has other time pressures, project management expertise may be brought in from outside.

External project management advisers should have a full and practical understanding of the procurement process including:

- key elements of the business case and, if applicable, the value-for-money benchmark(s);
- identifying and evaluating risks;
- tendering procedures;

- negotiation with bidders; and
- contracts management.

6.9.1.4 Process Auditor

An independent and external process auditor should be appointed for relatively large, complex projects, particularly those using a newer alternative procurement approach to ensure that an open, fair and competitive process is followed.

The process auditor provides ongoing advice to the proponent to ensure a fair, open, transparent and competitive procurement process. The process auditor's role will include, but not necessarily be limited to, the following:

- attending meetings of the advisory teams and committees as determined by the project proponent for the purpose of observing and reporting on the processes;
- attending and monitoring all briefing sessions with potential bidders;
- reviewing bid documents and, as required, other documents related to the procurement process; and
- observing the evaluation of potential bidders and final bids so as to provide verbal and written comments with respect to:
 - fairness;
 - objectivity;
 - consistency of process;
 - conflict of interest;
 - confidentiality;
 - completeness and accuracy of the process; and
 - financial capability/soundness of the bidders.

Proponents may also consider the use of a process committee to advise on the integrity of the processes used throughout the project and recommend improvements as needed.

6.10 PERSONNEL: THE PROJECT TEAM

Fundamental to the success of any infrastructure project is having personnel with the right mix of knowledge, skills and experience for the specific project.

While this expertise may be found within the delivering organization or from staff seconded from other departments or agencies, external specialist skills will be required for the project. Specialist skills required for the project—including financial, legal, technical, community relations and environmental—will vary with the type of project. The use of external specialists will primarily depend on the availability of internal staff with the required skills sets, and the complexity and scope of the project.

6.10.1 Financial Advisers

In most major procurements, the procurer will need suitably qualified and experienced external financial advisers. The role of such financial and other advisers should be confined to providing commercial expertise that is not available in-house. The key to the successful appointment of such advisers is a thorough investigation of their skills and previous relevant experience.

Although not necessarily all will be required for any given project, a financial adviser should be capable of providing the following services:

- advice on scoping the potential project;
- assistance with preparation of a business case;
- assistance in sounding out the market and raising the profile of the project (in conjunction with the project manager);
- assistance in developing the reference project and any value-for-money benchmark(s);
- advice on carrying out risk analysis, and identification and quantification of risk (although this can often be undertaken by procurers themselves in conjunction with technical advisers);
- structuring and drafting the bid documentation to ensure good quality responses (e.g., clarification of expected risk transfer);
- providing detailed financial evaluation criteria;
- assistance with reviewing bids; and
- providing financial advice and support during negotiations with bidders to contract signing.

6.10.2 Legal Advisers

Again, consideration should be made as to which skills and experience could be provided by in-house lawyers before considering the scope of external advice required.

After assessing in-house expertise, particular areas where external legal advice may be appropriate (without duplicating financial advice) include:

- structuring the transaction and advising on the procurement approach to be taken;
- advice on contractual issues with the tender documentation, and any other project agreements;
- contract drafting; and
- other legal advice (e.g., taxation, intellectual property; corporate finance, banking, etc.).

6.10.3 Technical Advisers

Technical advisers include architects, engineers, contract managers and other technical professions. Agencies need to be clear about what technical advice is required, particularly over and above the skills that may exist in-house or from their financial advisers.

Specific technical advice may be of particular use, for example, in the following areas:

- assisting to define output specifications for the physical asset;
- technical assumptions to be used in business cases;
- drafting technical aspects of tender documents;
- technical evaluation of proposals and bids, including capability of contractors;
- quality assurance during the construction phase together with arrangements for sampling contractor compliance;
- estimating the value of assets;
- technical aspects of facilities management; and
- IT and business processes.

6.11 BIDDING PROCESS

The objective of the bidding process is to choose a suitable partner, on the best possible terms—a partner with the skills, experience and resources necessary to secure the desired services in the most efficient way possible. Experience suggests that the best way of finding a suitable partner at a reasonable cost is to hold a competition among prospective bidders.

In general, the more competitive and transparent the process for choosing a contractual partner, the greater the likelihood that the best possible deal will be achieved and that the deal will be politically sustainable. It is therefore required that provincial line ministries, provincial government agencies and broader public-sector partners—municipalities, hospitals, school boards, colleges and universities—implement a competitive bidding process when choosing a partner.

6.11.1 Overview of the Bidding Process

All proponents must obtain the necessary approvals and authorizations before any RFEIs, RFQs, RFB/Ps or other requests are released into the public domain. Proponents should seek to adhere to relevant procurement directives.

6.11.2 Requests For Expressions of Interest (RFEI)

Depending on the type of infrastructure, the proponent may decide to gauge the potential for quality bids. The contacting of interested parties to assess interest can be

accomplished through direct mailing, advertising and the holding of “information sessions.” Regardless of the method used to gauge public interest, it is imperative that the process be fair and transparent.

The proponent may utilize RFEIs to determine the interest of private-sector participants. The information contained in the RFEI should be carefully drafted under the guidance of legal counsel to mitigate the risk of litigation.

Responses to the RFEI should be reviewed to develop a shortlist that can lead to the invitation to submit formal bids to the project. The evaluation of the RFEI must be fully documented, with all recommendations fully justified on the basis of criteria presented in the RFEI. Upon selection of the successful party, the unsuccessful parties should be debriefed. This debriefing will provide valuable feedback on specific matters of concerns with the competitive procurement process and with the perceptions of doing business with the public sector.

6.11.3 Request For Qualifications (RFQ)

In certain situations, a RFQ may follow the issuance of a RFEI or the RFQ may be issued and subsequently followed by a RFB/P (see below). The issuance of a RFQ will provide an opportunity to pre-qualify a potential participant, ensuring that potential bidders have the technical and financial capacity to undertake the task and a track record in performing similar tasks.

The pre-qualification process can also reduce the costs of the bidding process and impose discipline on the proponents by requiring them to define early on the type of project they want. Having a large number of bidders in the bidding process can increase the complexity and cost but not necessarily increase the quality of the winning bid. Limiting bidding to a few pre-qualified participants would also increase a potential bidder’s motivation to participate in bidding, because it increases each bidder’s chance of winning. The proponent may choose to bypass the RFEI and RFQ process and proceed directly with the RFB/P. Such a decision should be reviewed carefully.

6.11.4 Request For Bids/Proposals (RFB/P)

With the pre-qualification portion of the process completed, the final step of issuing the RFB/P to the pool of pre-qualified participants can be undertaken. The RFB/P should:

- clearly describe the procurement process and provide enough information for bidders to make an informed decision on whether to respond to the proposed business opportunity; and

- be prepared under the guidance of legal counsel to mitigate litigation risk and ensure a fair, transparent and efficient bidding process.

Written proposals received by the short-listed bidders will focus on the bidder's past performance, in terms of their technical and operational competence. The proponent will then review the written submissions and possibly ask each short-listed bidder to make an oral presentation that will focus on the bidder's overall capability, relevant experience and financial stability to form a successful business relationship. Selection of successful bidders should be based on the criteria set out in the RFB/P. A debriefing session for unsuccessful participants is strongly recommended.

6.12 CONTRACT MANAGEMENT

The contract management process follows selection of the successful bidder to the end of the project/service life and in almost all instances includes succession planning.

A contract management team should be established prior to the execution of the final contractual arrangement. This team will initially be composed of members from the procurement team to enable the continuation of working relationships with the private sector and maintain project direction. The composition of the contract management team will change to reflect the movement of the project through its life cycle. It is important to have members with the appropriate expertise at the different phases of the life cycle of the contract.

As with any contractual arrangement, the proponent should ensure that appropriate mechanisms for dispute-resolution procedures are negotiated and incorporated in the contract documentation. These mechanisms (ranging from cash penalties to the repatriation of services) should be activated with the aim of resolving a dispute at the earliest stage possible, minimizing service disruption and avoiding litigation. Utilization of alternative dispute-resolution mechanisms is also encouraged and should be incorporated in contract documentation.

6.12.1 Objectives of Contract Management

The objectives of contract management are to ensure:

- project/services are delivered under contract according to the time, cost, quantity and/or quality standards specified in the contract; and
- proponents have sufficient information to enable them to make decisions regarding succession arrangements at the conclusion of the term of the contract.

Project managers must carry out three key stages of contract management to ensure that optimum results are gained from the contractual arrangement:

- implementation phase (post-bid stage);
- ongoing day-to-day management phase; and
- evaluation and succession planning.

6.12.2 Implementation Phase

The first phase of contract management commences from the time the preferred bidder is selected. It would normally end at the commencement date of the contract but can extend for a period following commencement, depending on the nature and complexity of the contract and the time available to complete the required transition phase.

There are, however, several steps required by the proponent at the post-bid stage of the process prior to the finalization of the contract. Once a contract has been awarded, the proponent and the winning bidder will likely need to clarify some issues before signing their contract(s). Some of these issues may arise from the lack of clarity in the draft contract documents, while others may arise as the winning bidder seeks financial closure. The post-bid processes can be lengthy and can also lead to many changes. Bidders may bid to win knowing that there could be scope for changes in their commitments during the contract negotiations. Provincial line ministries, provincial government agencies, municipalities and broader public-sector partners may seek to reduce such risks by:

- requiring detailed and firm evidence at the bidding stage that financial closure can be reached within a specified period;
- preparing draft contracts so as to minimize the scope of changes as a result of post-bid negotiations; and
- keeping the runner-up in the bidding process ready to replace the winning bidder.

Prior to awarding or executing an agreement, a probity audit report should also be prepared. This report should provide an opinion on whether all processes have been conducted openly, fairly and in accordance with applicable policies, standards and guidelines.

A project continuation document should also be prepared and updated as needed throughout the life of the project to enable the transfer of knowledge regarding the project within the agency. This document should contain key details of the project from the desired outcomes to legal responsibilities and critical dates.

6.12.3 Ongoing day-to-day management phase

This phase covers the life of the contract from the commencement to termination dates. The contract manager's responsibility, during the ongoing management of the contract, is to ensure that risks from both external and internal sources that were clearly identified as part of the risk assessment process are managed to ensure effective delivery of the contracted service.

In order to effectively monitor progress of the contract, the project manager must establish a reporting regime that matches the nature and complexity of the contract being managed, to monitor effectively the performance of the provider. As part of the monitoring, proponents should provide a quarterly report to PIR and the appropriate line ministry on the current status of the project. The report should contain key issues such as the performance and service issues and any changes in the risk profile or contractual disputes. Quarterly monitoring will act as an auditing tool to ensure that the project is meeting contractual obligations and that value for money is achieved.

6.12.4 Evaluation and succession planning

This phase of the contract management life cycle aims to ensure a smooth succession phase at the end of the contract period to ensure minimal impact on service provided. The nature and complexity of the service will dictate the effort required to manage the issues that will become apparent in this stage.

The contract succession phase, which may commence before the contract is completed, also involves a review of the successes and failures that occurred over time in the contract arrangements. It is particularly beneficial to establish whether the issues that arose resulted from difficulties with the initial tender specifications or the signed contract itself (including the form of relationship that resulted from the contract and the pricing regime put in place).

A post-implementation review should be conducted within 12 months of implementing the project to ensure outcomes identified in the business case have been delivered. The post-implementation review should highlight both the positive and negative aspects of the project to facilitate better planning, construction, implementation and management. The findings of the review should be reported to PIR, the appropriate line ministry and public-sector partner(s).

ASSET MANAGEMENT

7.1 ASSET MANAGEMENT

Asset management is a systematic process to guide the planning, acquisition, operation and maintenance, renewal and disposal of assets. The objective of asset management is to maximize the impact of an asset in supporting the delivery of high-quality public services and manage related risks and costs over the entire life cycle of the infrastructure asset.

To effectively manage a public-sector entity's assets, it is important for managers of an entity to know:

- the organization's assets and what they consist of;
- present replacement and net book value;
- the condition, backlog maintenance and decay rate of the infrastructure assets;
- required legislative/regulatory/other standards for the assets;
- optimal maintenance required to provide the reliability or cost-effective life of service delivery;
- occurrence and timing of rehabilitation and replacement programs;
- cost of future maintenance, rehabilitation and replacement programs;
- program financing and the impact on customers and stakeholders; and
- effects of different levels of funding on level of service provided.

An entity should also have an asset management plan. Generally, infrastructure asset management plans include:

- service-level requirements of the asset(s);
- assessment of current asset condition, performance and service potential;
- present and future infrastructure investment requirements;
- operations and maintenance plans for the short, medium and long terms;
- long-term economic, social and environmental sustainability of the asset(s); and
- identification of long-term (sustainable) funding strategies.

Infrastructure asset management plans are living documents that must be reviewed and updated on a consistent basis over the life cycle of the asset.

7.2 AN INFRASTRUCTURE ASSET MANAGEMENT PLAN FOR ONTARIO

PIR will support the development of asset management and information systems addressing inventory, state of repair and future investment requirements with respect to Ontario's infrastructure; and promote asset management best practices in the broader public sector and publicly owned infrastructure (e.g., municipalities, hospitals and universities).

Beginning with the government's own assets, PIR will work with the Ontario Realty Corporation and infrastructure ministries to develop asset management and information systems addressing asset inventory, state of good repair, life-cycle costing and future investments. Accountability frameworks will be implemented to ensure ongoing asset management for government assets to achieve a state of good repair.

Appropriate approaches to infrastructure financing and procurement combined with sound asset management strategies are critical to allowing the government to make long-term strategic choices with respect to infrastructure investments in Ontario.

The government's comprehensive asset management strategy will:

- support both the development of provincial infrastructure strategies and programs;
- promote ongoing asset inventory, state-of-good-repair assessments and depreciation as standard practice in municipalities and capital-intensive sectors; and
- develop a sound database with distributed information and management accountabilities across infrastructure ministries.

A major component of the asset management strategy will be the ability to develop indices including:

- asset inventory age, condition, value and expected useful life;
- life-cycle costing;
- state of good repair;
- measures of hospital treatment capacity; and
- measures of reduced traffic congestion.

PIR will work with other ministries, municipalities and broader public-sector partners to:

- develop an inventory of capital infrastructure in the province;
- determine the valuation and replacement value of assets;
- determine the ongoing maintenance needs—both present and future; and
- determine the ongoing updating of capital stock and investment.

